REMARKS

Applicants courteously solicit favorable reconsideration of this application upon entry of the present Amendment.

Claims presented and request for rejoinder

Applicants present claims 1-11, 14-18, and 20-30.

The new claims 28-30 find basis in the original specification throughout and are believed to be grouped with the elected claims.

Traversing the Rejections

Applicants traverse the rejection of claims 1-7, 16-18, and 21-27 under 35 U.S.C. §103(a) as being unpatentable over Kettlitz et al. (U.S. 6,235,894) in view of Mori (JP 57-186465A).

It is respectfully submitted that the rejected and added claim(s) would have been unobvious over the cited references.

Applicants courteously submit the references do not teach the present inventions, would not have been combined and, furthermore, even if, *arguendo*, they were combined, the elected claimed inventions would have been unobvious to a person of ordinary skill in the art.

In short, even if Mori would have been combined with Kettlitz, the combination would not have suggested the viscosity increase by re-heating the UHT-heated product as stated in claim 1, claim 7, claim 22, claim 23 or claim 24. A person of ordinary skill in the art would have had no incentive or reason to select for UHT-treated products that particular starch of

Kettlitz for use in Mori, nor selecting it for solving Applicants' problem.[1] Restated, Applicants confronted a problem needing a solution, namely, the provision of a heat-treated, sterilized product having a relatively low viscosity after a UHT treatment, and displaying an increased viscosity when reheated. Kettlitz does not mention UHT-treatment and, furthermore, contrary to the present invention Kettlitz teaches products that maintain a stable high viscosity upon reheating or cooling. Kettlitz specifically discloses the "high viscosity is also retained after repeated heating and cooling" (col. 4, lines 30-31), which certainly does not teach "said UHT-treated product has a viscosity between 0.10 to 0.50 times the viscosity obtainable after re-heating of said UHT-treated product" as in claim 1, nor the "the UHT-heated product has a viscosity that is below 1500 mPa.s and is 0.15 to 0.50 times the viscosity of said reheated food product, said reheated food product having a viscosity above 2000 mPa.s" as in claim 24. These gaps in Kettlitz's teachings are not overcome by citation to the ***fluid*** lactic cream products according to Mori.

I. The prior art does not teach (A) "wherein, after UHT-treatment, said UHT-treated product has a viscosity between 0.10 to 0.50 times the viscosity obtainable after re-heating of said UHT-treated product" as in claim 1; "wherein the UHT-treated product has a viscosity that increases upon reheating, and whereby the viscosity is 0.15 to 0.50 times the viscosity obtained after reheating the UHT-treated product in step (f)" as in claim 22; or "before reheating said product has been UHT-treated and the UHT-heated product has a viscosity

[1] "Of course *all* of the references may be used to show what the art knew, and in that sense "combined" but the fact remains that neither reference contains the slightest suggestion to use what it discloses in combination with what is disclosed in the other." *In re Adams*, 148 U.S.P.Q. 742, 745 (CCPA 1966).

that is below 1500 mPa.s and is 0.15 to 0.50 times the viscosity of said reheated food product, said reheated food product having a viscosity above 2000 mPa.s," as in claim 24.

Even if combined, Kettlitz and Mori would not have suggested these claim elements.

a. The Primary Reference does not teach UHT treatment.

Kettlitz et al. (U.S. 6,235,894) hereinafter "Kettlitz," specifically discloses the "high viscosity is also retained after repeated heating and cooling" (col. 4, lines 30-31), which does not teach "said UHT-treated product has a viscosity between 0.10 to 0.50 times the viscosity obtainable after re-heating of said UHT-treated product" as in claim 1, nor the "the UHT-heated product has a viscosity that is below 1500 mPa.s and is 0.15 to 0.50 times the viscosity of said reheated food product, said reheated food product having a viscosity above 2000 mPa.s" as in claim 24. A prior Office Action acknowledges "Kettlitz et al do not specifically disclose UHT treatment of the food products."

The prior art does not teach "a UHT-treated product comprising a stabilized starch n-alkenyl succinate as a texturizing agent…"

Indeed, the gaps in Kettlitz's teachings are not overcome by citation to the sauce products according to Mori et al. (JP S57-186465A) hereinafter "Mori".

b. Neither Kettlitz Nor Mori Teach Viscosity Increase Upon Reheating a UHT-treated food product.

(1). Kettlitz teaches no viscosity increase, and acknowledges a possible decrease.

Kettlitz teaches no increase in viscosity as recited in claims 1, 22, 23 or 24. Kettlitz discloses stabilized starches that ***maintain/retain*** their pre-existing viscosity ***even after***

reheating. Kettlitz states the "high viscosity is also retained after repeated heating and cooling." Kettlitz at col. 4, lines 30-31. This would not have suggested the viscosity recitations in any of claim 1, claim 22 or claim 24, especially not the increase in viscosity upon reheating the UHT-treated product, and certainly not the viscosity recited in the heating, cooling and reheating in claim 22.

Besides, Kettlitz elsewhere refers to "heat-stable high viscosity starches" (Abstract) and at column 4, lines 7-8, and lines 12-16, Kettlitz explains:

> The products of the present invention are starches which ... have been modified in such a way that they retain a high viscosity even upon prolonged heating.
>
> * * *
>
> **The starches of the present invention show only a slight decrease of viscosity** during the measurement with the Brabender viscograph, preferably the drop in viscosity is less than 20%[,] more preferably less than 10%[,] during heating at 95°C.

Kettlitz would not have suggested the viscosity recitations in any of claim 1, claim 22, claim 23, or claim 24: Kettlitz specifically states that a high viscosity is retained upon repeated reheating and cooling, or there is "a slight decrease of viscosity."

Applicants have considered the Office Action at page 4 and its citations to Kettlitz. The Office Action cites a paragraph mentioning heating (Kettlitz, col. 1, lines 46-50). That paragraph refers to "cooking stable starches" (col. 1, line 46). An antecedent to "cooking stable starches" includes col. 1, lines 35-36 that refer to a heat stage that "guarantees a stable paste viscosity." It is consistent with the subsequent Kettlitz teaching in col. 4 that the modified starches have a stable viscosity upon repeated heating and cooling. In short, a "stable paste viscosity" is not the viscosity increase recited in Applicants' claim 1, claim 22, claim 23 or claim 24, nor is it what is alleged in the Office Action.

(2). Reliance on Inherency is Misplaced.

Inherency is irrelevant and immaterial as to an unknown product having an unknown advantage and an unknown characteristic. *In re Spormann*, 150 U.S.P.Q. 449, 452 (CCPA 1967) ("Obviousness cannot be predicated on what is unknown."); *In re Adams*, 148 U.S.P.Q. 742 (CCPA 1966) ("Of course it is inherent, otherwise appellant's invention would not work. But patentability here does not hinge on inherency. It depends on the unexpected and unsuggested increase in heat transfer *efficiency*. No reference suggesting this has been produced, only *ex post facto* explanations as to why anyone should have been able to see that it would be more efficient to use aerated water.")

Kettlitz is focused on overcoming the undesirable viscosity breakdown in food by stabilizing the starch granules against heat.

The Office Action dated December 07, 2010, pages 8-9, states that "one of ordinary skill would recognize the viscosity after reheating... would have been an inherent result..." (emphasis added). There does not appear to be factual basis for saying "one of ordinary skill would recognize," since neither Kettlitz nor Mori disclose any viscosity relationship between the product before reheating and the reheated product after reheating. Certainly, neither discloses the viscosity increases upon reheating the UHT-treated product as recited in claims 1, 7, 22, 23 or 24. Indeed, the Mori reference does not disclose any reheating, and Kettlitz discloses a high viscosity is retained and specifically not increased. According to Kettilitz, the product's viscosity, whatever it is, can ***decrease*** by less than 20% (col. 4, line 15) when the product is heated at 95ºC. A **decrease** in viscosity *would not have suggested* the **increase** as recited in Applicants' claims.

(3). Kettlitz teaches away from the claimed inventions.

Contrary to Applicants' claims 1, 22, 23 or 24, Kettlitz teaches no increase in viscosity upon reaheating.

An inference that a claimed combination would not have been obvious is especially strong where the prior art's teachings undermine the very reason being proffered as to why a person of ordinary skill would have combined the known elements *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314 (Fed. Cir. 2009); *In re Kahn*, 441 F.3d 977, 990 (Fed. Cir. 2006) ("A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant.")

Kettlitz discloses stabilized starches that ***maintain/retain*** their pre-existing viscosity ***even after reheating***. Kettlitz states the "high viscosity is also retained after repeated heating and cooling." Kettlitz at col. 4, lines 30-31. This would not have suggested the viscosity recitations in any of claim 1, claim 22 or claim 24, especially not the increase in viscosity upon reheating the UHT-treated product, and certainly not the viscosity recited in the heating, cooling and reheating in claim 22.

Furthermore, Kettlitz elsewhere refers to "heat-stable high viscosity starches" (Abstract) and at column 4, lines 7-8, and lines 12-16, Kettlitz explains:

> The products of the present invention are starches which ... have been modified in such a way that they **retain a high viscosity even upon prolonged heating (emphasis added)**.

Thus, Kettlitz actually teaches away from the present claims by disclosing products in which maintaining a pre-existing high viscosity is the objective.

(4.) NO APPARENT REASON TO COMBINE
The Secondary Reference "Mori" Does Not Supply Teachings Missing from Kettlitz. Mori's sauce product is not even meant to be reheated.

Applicants submit that the Office Action has provided no reason or rationale that would have one of ordinary skill in the art to arrive at the subject matter as claimed based on Kettlitz and Mori. There would been no motivation to combine the disclosure of Kettlitz with the disclosure of Mori. The primary reference actually teaches away from the presently claimed invention. The secondary reference (Mori, English translation of the Abstract) does not undo the teachings of Kettlitz (primary reference).

Therefore one skilled in the art would not have been motivated to combine heat-stable high viscosity starches with a low viscosity sauce as taught by Mori, with any expectation of having a UHT-treated product according to Applicants' claims.

Moreover, there is no proper rationale, motivation, suggestion or guidance yielding predictable results that would lead one of ordinary skill in the art to combine two unrelated substrates with such vast differences in viscosity withstanding that the movement of the skilled in the primary reference cited is in a different direction towards "maintaining high viscosity.'

Furthermore, Kettlitz provides no guidance of how these two unrelated substrates (high viscosity starch product) would react when combined to make a sauce. Thus, the combined references cannot be relied upon for the basis of this obviousness-type rejection.

(5.) Even if Mori were combined with Kettlitz, their combined teachings would not have suggested claim 1, claim 7, claim 22 or claim 27.

Taking the combined references at face value, the use of a stabilized, heat-treated starch according to the Kettlitz patent, even if considered with the product according to Mori,

might have led – *arguendo* – to a product having a retained/maintained viscosity as taught by Kettlitz (see Kettlitz at col. 4, lines 5-16).

Neither Kettlitz nor Mori disclose any viscosity relationship between the product before reheating and the reheated product, and neither discloses the viscosity increases upon reheating the UHT-treated product as recited in claims 1, 7, 22, 23 or 24. Kettlitz does not refer to a UHT-treated product, and discloses the viscosity either remains stable or decreases somewhat after reheating. Mori does not alter that deficient teaching since it does not disclose or suggest reheating of a UHT-treated product, nor that the viscosity increases upon reheating the UHT-treated product as in the subject claims.

In other words, Mori does not cure the deficiency of Kettlitz. Mori merely discloses an aseptic sauce and does not teach or suggest problem to be solved associated with viscosity.

Furthermore, Applicants' Comparative Example reports using a hydroxypropylated tapioca diphosphate starch as therein stated, which would seem to be a modified starch, and it is apparent that it did not yield a product in which the viscosity before reheating is according to claims 1, 7, 22, 23 or 24.

Applicants point this out as evidence to rebut a thesis that any modified starch would lead to the products according to the aforementioned claims.

II. An Examiner's Declaration is requested.

Applicants request a declaration from the Examiner setting forth a factual basis for (1) reheating a fluidic lactic cream; (2) why a person of ordinary skill would have considered reheating such a fluidic lactic cream with an expectation that its viscosity would increase as recited in the claims; and (3) asserting, contrary to Kettlitz at col. 4, lines 5-16, that "viscosity after re-heating, this characteristic would have been expected to be in the claimed range..."

III. Conclusion

Applicants courteously solicit favorable reconsideration and allowance. The Examiner is courteously invited to contact Applicants' legal representative in an effort to resolve any remaining issues.

IV. Fees

To the extent necessary during prosecution, Applicants hereby request any required extension of time not otherwise requested and hereby authorize the Commissioner to charge any omitted fee required to secure entry of this Amendment, including application processing, extension, and extra claims fees, to Deposit Account No 06-1135 regarding our order number 7393/84061.

Respectfully submitted,

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